United States Department of Agriculture
Forest Service
FPM
3620 Interstate 85, N.E.
Doraville, Georgia 30340

Reply to 3430 (Report 84-3-4)

Date May 11, 1984

Mr. Richard Maeder, Superintendent
USDI National Park Service
Colonial National Historical Park
P. O. Box 210
Yorktown, Virginia 23690

Dear Mr. Maeder:

The purpose of my visit to Colonial National Historical Park from May 8-10, 1984 was to evaluate the status of southern pine beetle infestations. After visiting with you on the afternoon of May 8, Pete Baril and I accompanied Ms. Ruth Beck from the College of William and Mary and Mr. Gary Frazer of the USDI Fish and Wildlife Service to the great blue heron rookery near Beaverdam Creek. Some 335 nests in pine trees are currently in use in this rookery. A great deal of concern existed because southern pine beetle activity has killed a number of the nest trees over the past few years. At the present time no actively infested trees are present in or immediately adjacent to the rookery. Since the spot is inactive, cutting of the standing dead trees is not recommended and would only disrupt the heron population. As these standing dead trees degrade, they will become unsuitable for nesting. However, the herons will probably continue to select only adequate nesting sites and the presence of these dead trees should have little impact on the heron population.

The aerial survey conducted by Pete and I on May 9 resulted in locating 13 areas of red or fading trees. The appearance of these areas from the air suggested that they might be active infestations. On the afternoon of of May 9, Pete and I ground checked two areas near Halfway Creek. A total of three actively infested trees were found and marked. Salvage operations had been conducted in both areas prior to my visit and I suspect that these three trees were overlooked. I ground checked an additional nine areas later in the afternoon and found only 12 actively infested trees. In eight of these nine areas, salvage operations had been conducted before my visit and again I suspect that the cutters overlooked these trees. On May 10, I ground checked the largest suspect area (25 trees) along the Parkway just north of Brutans Height School. No actively infested trees were found in this area.

The only area observed during the flight which was not ground checked was located on Swann's Point and consisted of only one tree.

The results of the survey and ground checks indicate that southern pine beetle activity is rapidly declining at the Park. I believe that the rapid salvage of infested trees, buildups in populations of parasites and predators and environmental conditions unfavorable to the beetle have contributed to this decline. Southern pine beetle like many insects is cyclic. Populations build over a

period of several years, remain high for several years and decline very rapidly. I believe that the overall southern pine beetle populations at Colonial and in coastal Virginia are in the declining phase. However, should conditions return that favor southern pine beetle population expansion, the trend could reverse.

For the present, I suggest that the active trees found during this evaluation be cut and removed through salvage or cut and left. Additional checks after treatment should be made in these areas to insure that all active trees were treated and no additional active trees remain. An additional aerial survey should be conducted in the late summer or early fall.

You and your staff should be complimented on the actions that have been taken to minimize the impact of the southern pine beetle infestations on the aesthetics and natural resources of the Park. I was especially impressed with the "clean" appearance of the salvaged areas. Very little damage to residual trees or visual impact occurred. I believe that this is a result of Pete's careful guidance to the salvage operators and his respect for the importance of the aesthetic value of the Park and Parkway. Again, my compliments.

As always, I appreciate the opportunity to work cooperatively with you and your staff on forest insect and disease problems. If I can be of further assistance, let me know.

Sincerely,

William A. Carothers

WILLIAM A. CAROTHERS
Entomologist

cc: Harold Flake
Ken Swain
Mike Maule
Pete Baril
Gary Frazer
Ruth Beck
Cal Morris